

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/806,743	MILLER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael B. Holmes	2121	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to April 24, 2006.
2. ☒ The allowed claim(s) is/are 24,25,27,28,30-46,48,49,51-65,67,68 & 70-83.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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|---|--|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
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**UNITED STATES PATENT AND TRADEMARK OFFICE**

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P.O. Box 1450, Alexandria, Virginia 22313-1450 – [www.USPTO.GOV](http://www.USPTO.GOV)

**Examiner's Detailed Office Action**

1. Claims 24, 25, 27, 28, 30-46, 48, 49, 51-65, 67, 68 & 70-83 are allowed.

**Examiner's Admendment**

2. On Friday, May 5, 2006, George H. Gates, Reg. No. 33,500, applicant's representative, authorized the examiner to amend the following claims. An examiner's interview has been included.

**Claim 24**

24. (CURRENTLY AMENDED) A computer-implemented system for performing data mining applications, compising:

(a) a computer having one or more data storage devices connected thereto, wherein a relational database is stored on one or more of the data storage devices;

(b) a relational database management system, executed by the computer, for accessing the relational database stored on the data storage devices by executing Structured Query Language (SQL) statements;

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(c) an analytic application programming interface (API), executed by the computer, for [invoking] generating one or more scalable data mining functions comprised of SQL statements for execution by the relational database management system, wherein the scalable data mining functions identify and interpret patterns in the relational database; and

(d) one or more analytic algorithms, executed by the computer, for interfacing to the analytic API to [invoke] generate the scalable data mining functions, wherein the scalable data mining functions process data collections stored in the relational database and produce results that are stored in the relational database.

**Claim 44**

44. (CURRENTLY AMENDED) A computer-implemented method for performing data mining applications, comprising:

(a) storing a relational database on one or more data storage devices connected to a computer;

(b) accessing the relational database stored on the data storage devices using a relational database management system by executing Structured Query Language (SQL) statements on the computer;

(c) executing an analytic application programming interface (API), on the computer, for [invoking] generating one or more scalable data mining functions comprised of SQL statements for execution by the relational database management system, wherein the scalable data mining functions identify and interpret patterns in the relational database; and

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(d) executing one or more analytic algorithms, on the computer, for interfacing to the analytic API to [invoke] generate the scalable data mining functions, wherein the scalable data mining functions process data collections stored in the relational database and produce results that are stored in the relational database.

**Claim 45**

45. (CURRENTLY AMENDED) An article of manufacture tangibly embodying logic for performing a computer-implemented method for performing data mining applications, comprising:

(a) storing a relational database on one or more data storage devices connected to a computer;

(b) accessing the relational database stored on the data storage devices using a relational database management system by executing Structured Query Language (SQL) statements on the computer;

(c) executing an analytic application programming interface (API), on the computer, for [invoking] generating one or more scalable data mining functions comprised of SQL statements for execution by the relational database management system, wherein the scalable data mining functions identify and interpret patterns in the relational database; and

(d) executing one or more analytic algorithms, on the computer, for interfacing to the analytic API to [invoke] generate the scalable data mining functions, wherein the scalable data mining functions process data collections stored in the relational database and produce results that are stored in the relational database.

## REASONS FOR ALLOWANCE

3. Regarding claims 24, 25, 27, 28, 30-46, 48, 49, 51-65, 67, 68 & 70-83 applicant's remarks filed April 24, 2006, have been fully considered and are persuasive. In particular, page 18, G. Applicants' Claims Are Patentable Over The References recites "*an analytic application programming interface (API), executed by the computer, for generating one or more scalable data mining functions comprised of SQL statements for execution by the relational database management system, wherein the scalable data mining functions identify and interpret patterns in the relational database; and*" "*one or more analytic algorithms, executed by the computer, for interfacing to the analytic API to generate the scalable data mining functions.*"
4. Moreover, page 19, paragraph 2, lines 4-12, recites "*the SQL API of the RDBMS in Iyer does not generate scalable data mining functions comprised of SQL statements for execution by the relational database management system, wherein the scalable data mining functions identify and interpret patterns in the relational database. Instead, the SQL API of the RDBMS in Iyer only invokes functions of the RDBMS, but says nothing about generating a set of scalable data mining functions as recited in Applicant's claims. Further, Iyer does not teach or suggest an analytic algorithm, executed by the computer, that interfaces to the analytic API to generate the scalable data mining functions.*"
5. Accordingly, claims 24, 25, 27, 28, 30-46, 48, 49, 51-65, 67, 68 & 70-83 are allowed.

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## Correspondence Information

6. Any inquires concerning this communication or earlier communications from the examiner should be directed to Michael B. Holmes, who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. or via telephone at (571) 272-3686 or facsimile transmission (571) 273-3686 or email [Michael.holmesb@uspto.gov](mailto:Michael.holmesb@uspto.gov).

If you need to send an Official facsimile transmission, please send it to (571) 273-8300.

If attempts to reach the examiner are unsuccessful the Examiner's Supervisor, Anthony Knight, may be reached at (571) 272-3687.

Hand-delivered responses should be delivered to the Receptionist @ (Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22313), located on the first floor of the south side of the Randolph Building.

***Michael B. Holmes***

Patent Examiner

Artificial Intelligence

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United States Department of Commerce

Patent & Trademark Office

*Tuesday, May 02, 2006*

*MBH*

  
**Anthony Knight**  
Supervisory Patent Examiner  
Group 3600